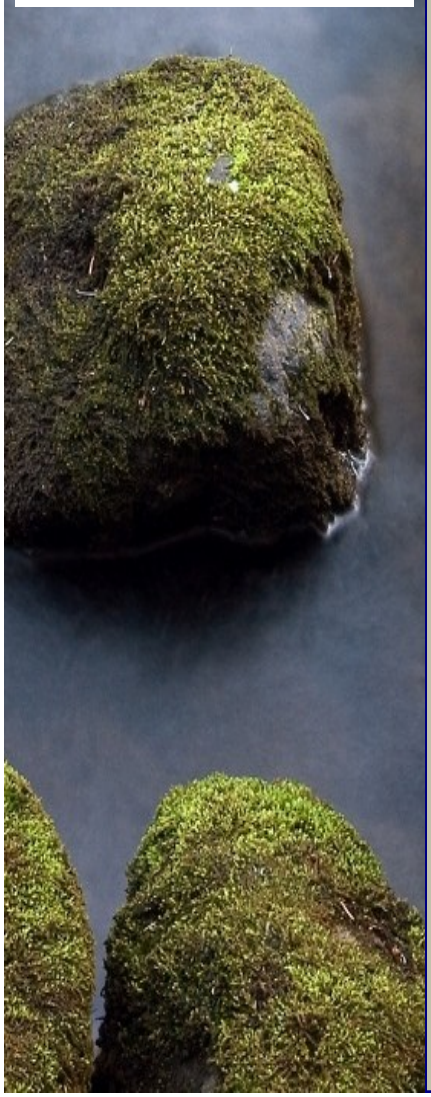
Public Works and Natural Resources
Water Resources and Environmental Technical Services
Industrial Pretreatment Program

Baseline Monitoring Reports (BMR)

In cases were there is no discharge prior to the permit date, you may request that the BMR information be submitted with the 90-day Compliance Report .

If your facility was in operation at another location and there are no changes to the system or pretreatment at the Longmont location, you may submit monitoring completed at the previous location.



Baseline Monitoring establishes the pollutant loads generated from your operations and indicates a need for additional pretreatment operations.

- ☑ All analyses are performed using approved EPA methods in 40 CFR 136.
- ☑ All analysis reports from the contract lab are to be included in the report.
- ☑ All analyses must meet the most stringent of the local or categorical limits, if applicable. Contact the IPP office for current local limits
- ☑ Report each result in mg/L.
- ☑ If the categorical standard is reported in mass (pounds/day) rather than concentrations (milligrams/liter), convert your concentrations using the following equation: Mass, pounds/day = concentration, mg/L x 8.34 x flow, gallons/day x 0.001
- ☑ For reporting flows, daily wastewater volumes from the regulated process stream or daily water usage of the process for the two week period in which the sampling is conducted is acceptable.

Notes on Sampling for the BMR

All sampling occurs during the process discharge hours only. The sampling site is immediately downstream from the pretreatment facility or regulated operation. There shall be no dilution of the process wastestream prior to the sample location. Alternate sampling sites require City approval. *Note that the sampling detailed here is not the same as that required by the future permit.* ***This is for the BMR sample only***.

Grab samples– when the entire sample is collected at one time. The sample may be collected in a separate vessel or directly into the sample bottle. pH, temperature and cyanide are always collected as grab samples.

Composite samples—when a minimum of 8 grab samples are collected at equal intervals over the discharge time and mixed into one sample for analysis. This may be done manually or by using an autosampler. Composites are time paced or flow proportioned.

Batch discharges should be mixed prior to discharge and sample collection. If the volume is such that a proper mix cannot be assured, collect a composite sample as described below. If well mixed, 3 *separate grab* samples may be collected from 3 *consecutive* discharges. The samples shall be representative of normal operating conditions.

Continuous discharges require composite samples. Over a 2 week period, collect 3 composite samples during 3 *non-consecutive* days. Collections must occur during normal hours of business operation. Samples must be representative of normal daily operating conditions and collected at the same point where flow monitoring occurs.

For Total Toxic Organics, contact your contract lab for proper sampling techniques.

Sample Handling

Besides assuring that the sample is collected correctly, it is important to comply with sample handling requirements. If samples are handled incorrectly, the analysis results will be false. Though requirements are available in the Standard Methods for the Examination of Water and Wastewater, it is best to contact your contract lab for specific requirements.

Preservation

In general, samples are preserved in order to reduce degradation of the sample or to inhibit interferences. Different preservatives are used for different parameters, so the sample may be "split" into different bottles. It is important to not mix up the preservatives. Adding nitric acid to an ammonia sample will cause false positives.

The amount of preservative to be used depends on the volume, pH and buffering capacity of your sample. Add enough preservative to bring the sample to the correct pH. For example, metals samples need to be preserved with nitric acid until the sample pH is less than 2 s.u. Add the preservative, mix the sample and then, check the pH.

Many contract labs will provide sample bottles with the preservative already added. In this case, it is important that the bottle not be rinsed or overfilled or there will be a loss of preservative.

Samples should be kept refrigerated until preservatives are added or until delivered to the lab. Refrigeration will slow down degradation.

Bottles

The type of bottle may also effect the analysis. For example, Oil & Grease samples are collected in glass bottles.

Holding Times

Finally, keep in mind that analyses have different holding times. pH is 15 minutes. Cyanide is 10 days. Metals are 1 to 6 months.

Request Analysis for the following checked off Pollutants of Concern:

- ☐ Ammonia as Nitrogen (NH3-N)
- ☐ Benzene, Total
- ☐ BTEX
- ☐ Chromium, Total (Cr)
- ☐ Cyanide, Total (CN, T)
- ☐ Lead, Total (Pb)
- ☐ Molybdenum, Total (Mo)
- ☐ Oil and Grease (O&G)
- ☐ Selenium, Total (Se)
- ☐ Total Kjeldahl Nitrogen (TKN)
- ☐ Total Toxic Organics (TTOs)
- ☐ Arsenic, Total (As)
- ☐ Biochemical Oxygen Demand (BOD)
- ☐ Cadmium, Total (Cd)
- ☐ Copper, Total (Cu)
- ☐ Cyanide, Amenable to chlorine (CN,A)
- ☐ Mercury, Total (Hg)
- ☐ Nickel, Total (Ni)
- ☒ pH & Flow
- ☐ Silver, Total (Ag)
- ☐ Total Suspended Solids (TSS)
- ☐ Zinc, Total (Zn)

☐ Other:

Note on Confidentiality

All information identifying the nature of the discharge is made available to the public. Requests for confidential treatment of information is not applicable to any discharge data and shall be made in accordance to Code §14.08.435.